



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,002	07/11/2003	Axel Schaedler	30267.22760 4383	
7	7590 07/22/2005		EXAMINER	
Timothy D. B	Sennett	ENGLISH, PETER C		
Brouse McDowell, LPA 500 First National Tower 106 S. Main Street Akron, OH 44308-1471			ART UNIT	PAPER NUMBER
			3616	
			DATE MAILED: 07/22/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
Office Action Summan	10/618,002	SCHAEDLER ET AL.				
Office Action Summary	Examiner	Art Unit				
	Peter C. English	3616				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status		•				
1)⊠ Responsive to communication(s) filed on <u>06 June 2005</u> .						
2a) This action is FINAL . 2b) ⊠ This	s action is non-final.					
·	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) 1-12 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-12 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9)⊠ The specification is objected to by the Examiner.						
10) \boxtimes The drawing(s) filed on <u>06 June 2005</u> is/are: a) \square accepted or b) \boxtimes objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s)						
1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413)						
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08 Paper No(s)/Mail Date 20050531; 20040206. 	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate atent Application (PTO-152)				

Art Unit: 3616

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Species B (Figs. 12-25) in the reply filed on 06 June 2005 is acknowledged. The traversal is on the grounds that Figs. 1-11 and Figs. 12-25 are not different embodiments, but instead show different vehicles on which the invention may be employed. This is not found persuasive because the embodiment of Figs. 12-25 has a different transmission system (i.e., different belt and pulley system) than that of Figs. 1-11. Further, the embodiment of Figs. 12-25 has a different shifting mechanism (i.e., the vacuum actuator 20 operates an intermediate pivotal member 190 instead of actuating the slidable actuator rod 66) than that of Figs. 1-11.

The requirement is still deemed proper and is therefore made FINAL.

2. All of the pending claims read on the elected species. Therefore, no claims are currently withdrawn from further consideration pursuant to 37 CFR 1.142(b).

Drawings

3. The drawings are objected to because:

Reference number 20 should not appear in Fig. 1 since the vacuum actuator is not visible in this figure.

In Fig. 5, "30" should be "32". See Fig. 4.

Reference numbers 14, 20 and 22 should not appear in Fig. 12 since the engine, vacuum actuator and transmission are not visible in this figure.

4. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "intake manifold" (claims 3 and 4, line 2) must be shown or the feature canceled from the claims. No new matter should be entered.

5. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

6. The specification is objected to because:

The specification does not include an appropriate "Summary of the Invention".

At line 4 of the paragraph beginning at page 5, line 11, "25" should be "(not shown)". Note that reference number 25 is used for a port of the vacuum actuator. See Fig. 2 and page 7, line 29 to page 8, line 1.

At line 31 of the paragraph beginning at page 9, line 25, "162" should be "74, 162".

At line 32 of the paragraph beginning at page 9, line 25, "FIGURE 15" should be "FIGURES 11 and 15".

The specification provides a confusing description of the vacuum actuator 20. First, the actuator 20 is described as operating the transmission by acting on the slidable actuator rod 66. See the description beginning at page 7, line 19 together with Figs. 2, 3, 6 and 8-10. Then, the same actuator 20 is described as operating the transmission by acting on the pivotal sensor detector 190. See the description beginning at page 12, line

Application/Control Number: 10/618,002

Art Unit: 3616

11 together with Figs. 18-22. The specification should be amended to make it clear that these are in fact to different embodiments of the invention. Further, different reference numbers should be used for the second embodiment to avoid confusion, with the drawings being amended accordingly.

Appropriate correction is required.

Claim Objections

7. Claims 1-4 and 9-12 are objected to because:

In claim 1, at line 5, "as" should be "at".

In claim 9, at line 6, "as" should be "at".

In claim 9, at line 14, "is" should be "in".

In claim 10, at line 6, "is" should be "in".

In claim 11, at line 4, "a" should be inserted before "first".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

8. Claims 4, 8 and 12 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The specification fails to provide an adequate written description of the "cruise control system" recited in claims 4, 8 and 12. No explanation is given as to how maintaining the transmission control member in its current position effects "cruise control". Given applicant disclosure it is unclear how the claimed "cruise control" differs from the normal operation of the transmission.

9. Claims 1-12 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Application/Control Number: 10/618,002

Art Unit: 3616

Claim 1 is indefinite because it states that the electronic control system (see line 8) comprises an actuator (see line 12). The vacuum actuator of the invention is not "electronic" and therefore cannot be said to be part of the electronic control system.

In claim 3, "a third device" (line 4), "third input" (line 5), "third output" (line 6), "third position" (line 8), "fourth input" (line 8) and "fourth output" (lines 9-10) are indefinite because no "first" or "second" device, input, output or position have been previously recited.

In claim 3, lines 7-14 are inaccurate because they state that the adjustable member is moved to the neutral position after the sensor senses that the adjustable member is in the neutral position. It is unclear what is meant by this language, since it would seem impossible to move the adjustable member to the neutral position after it is already in the neutral position.

In claim 3, at line 8, "said third position" lacks proper antecedent basis. Further, at line 11, "a third position" is indefinite because the term is previously introduced at line 8.

In claim 3, at line 15, "fourth output" is indefinite because it is unclear what the relationship is between this "fourth output" and the "fourth output" introduced at lines 9-10.

Claim 5 is indefinite because it states that the shift control mechanism (see line 3) comprises an actuator "connected to the shift control mechanism" (see line 7) and "receiving said output from said shift control mechanism" (see lines 8-9). The actuator cannot be both part of the shift control mechanism and "connected to" the shift control mechanism to "receive" an output from the shift control mechanism.

Claim 6 is indefinite because it contradicts claim 5 from which it depends. Claim 5 states that the "electronic control system" receives the input and sends the output (see lines 5-6), but claim 6 states that the inputs are sent to the "shift control mechanism" (see lines 5-7) which in turn sends the outputs. Lines 2-8 of claim 7 and lines 4-6 of claim 8 are indefinite for the same reason.

In claim 7, "a third device" (line 2), "third input" (line 3), "third output" (line 4), "third position" (line 6), "fourth input" (line 6) and "fourth output" (lines 7-8) are

Application/Control Number: 10/618,002

Art Unit: 3616

indefinite because no "first" or "second" device, input, output or position have been previously recited.

In claim 7, lines 5-11 are inaccurate because they state that the adjustable member is moved to the neutral position after the sensor senses that the adjustable member is in the neutral position. It is unclear what is meant by this language, since it would seem impossible to move the adjustable member to the neutral position after it is already in the neutral position.

In claim 7, at line 6, "said third position" lacks proper antecedent basis. Further, at line 9, "a third position" is indefinite because the term is previously introduced at line 8.

In claim 8, at line 3, "said adjustable member" lacks proper antecedent basis. Note that this term is introduced in claim 6.

Claim 9 is indefinite because it states that the electronic control system (see lines 6-7) comprises an actuator (see line 8). The vacuum actuator of the invention is not "electronic" and therefore cannot be said to be part of the electronic control system.

In claim 9, at line 9, "an activating means" is indefinite because it is unclear what the relationship is between this "activating means" and the "activating means" introduced at line 7. In claim 10, at line 2, "an activating means" is indefinite for the same reason.

In claim 12, at line 6, "a first position" is indefinite because it is unclear what the relationship is between this "first position" and the "first position" introduced in claim 9, at line 12. The examiner suggests: in claim 12, at lines 6 and 7, change "first" to "second".

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 11. Claims 1-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Jow et al. (US 4,499,793). Jow et al. discloses a vehicle comprising: an engine E with a manifold M

Art Unit: 3616

in communication with a vacuum reservoir 10; a transmission T including an adjustable member 61, 63 for shifting the transmission; vacuum actuators A2, A3 which operate the adjustable member 61, 63; solenoid valves V2A, V2B, V3A, V3B in communication with the vacuum reservoir 10 for controlling the vacuum actuators A2, A3; a push-button control panel B that an operator uses to shift the transmission T into forward, neutral or reverse; and an electronic control unit U that receives inputs from the control panel B and actuates the solenoid valves V2A, V2B, V3A, V3B to control the vacuum actuators A2, A3, thereby shifting the transmission. The control unit U also receives inputs from sensors D3-D8 for sensing the position of the adjustable member 61, 63. Additional actuators A4, A5 serve to hold the adjustable member 61, 63 in position. The vehicle of Jow et al. is capable of "off road" use (i.e., a person could drive the vehicle through a field). Further, the transmission control disclosed in Jow et al. is considered to meet the broadly defined "cruise control" of claims 4, 8 and 12.

Conclusion

- 12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Pelligrino, Takeuchi et al., Hattori et al., Schweiger and Leigh-Monstevens teach electronically controlled transmissions.
- 13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter C. English whose telephone number is 571-272-6671. The examiner can normally be reached on Monday through Thursday (7:00 AM 5:00 PM).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on 571-272-6669. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Peter C. English

Primary Examiner Art Unit 3616

pe 19 July 2005